To begin my first column, I would like to express a belated thanks to the voting membership for your expression of confidence several years ago which now allows me the opportunity to serve as the 1997 Section President. So far the Section is having a very productive year.

Several years ago when I was a new participant in the Michigan Section, I would see the Executive Board gathered for their meetings and often wondered what it took to organize and make function a group like this. I guess it was then that I set my goal to become involved and hopefully gain the confidence of my peers to be elected to the Office of Director. Well, that happened in 1992 and now in 1997, I am fully realizing that it is not only my own commitment but that of many others which makes this Section function as successfully as it does. I am very pleased that over the past few years I have witnessed a turn around in our Membership’s attitude toward the Section activities. I enjoy having associates coming forward and asking to be involved. After a two-year lapse, we had an “election” for the Director’s position. I thank both Chuck Dutig and Kevin McCarthy for throwing their hats into the ring, knowing that one of them would be elected and begin a several year commitment to this Section. Also, members are coming forward and becoming involved with technical meetings. The Michiganite and the golf outing. You all deserve a round of applause. Are there other members who feel like I did several years ago? Please make your interest in our Section activities known to any Board Member. We will be glad to offer suggestions so that you will feel comfortable with your level of involvement.

My Michigan Section Goals for 1997 are as follows:

1. Produce a technical project for the Section.
2. Continue to increase the Educational Fund balance through Membership support.
3. Add a Michigan Section ITE Family Day event to the year’s activities.
4. Host an informative and well-attended District 3 Meeting in September.
1997 COMMITTEE CHAIRPERSONS

Program: Tim Haagena
Technical Projects: Art Slabonky
Nominating: William Hartwig
Membership: John Friel
Legislative: Matt Delong
Federal: Thomas Kryczkowski
Public Relations: Al Dewey
Educational: Joe Mezzaros
Chairperson: Bill Savage
Editors: Lee Lison
Assistant Director, Ron Dressender
City of Wyoming
Past President, William C. Hartwig
Project and Development Division
Michigan Department of Transportation

As Speed Limits Increase, the Death Rate Decreases
by Bob DeCorte

In 1969, when the speed limit was raised to 70 mph on limited access freeways, the death rate decreased to 4.9, second lowest in history. The energy-saving 55 mph limit was enacted in 1974 and the death rate decreased to its lowest point in history so far, 3.4. The resumption of higher speed limits, 65 mph in 1988, resulted in a 24% decrease in the death rate to 2.2 between 1983 and 1988.

Finally, the article states that the Michigan State Police recently estimated an increase of 250 deaths would be caused by raising the speed limit to 70 MPH. However, in a recent test of 70 mph speeds on 500 miles of freeways, deaths decreased more than 66% during the test period.

Since 1997, crash deaths have decreased 40%, vmt has increased 670% and the death rate has decreased 89%. During the same period, the speed limit doubled from 35 to 70 mph. Therefore, it's obvious that the crash rate decreases as the speed limit increases. If we extrapolate these statistics into the future, the State should reach a zero fatality rate in a few years. After all, our goal is zero fatalities, and by increasing the speed limit, we are on the right track. Can 90 mph and a zero fatality rate be far away?
March Notes...Cont from P.8

Phase I allows the problem to be identified at an informational meeting. Phase II involves both education and enforcement. Education occurs through the distribution of a brochure or letter describing means to address speed issues. The SMARTER (Special Monitoring Awareness Radar Trailer) letters sent to owners of vehicles recorded speeding can be used in the enforcement area. Phase III is the Engineering component where physical devices on the roadway are installed after exhausting the alternatives provided in Phase I and II.

Kevin ended his talk with a slide that illustrated their methodology for constructing speed humps used in Phase III. Snow removal has not been a problem with the humps however, we should note that the City doesn't plow unless the snow depth is greater than 4 inches. The City has found that speeds drop overall between humps. They found they need to position signs and mailboxes to ensure that drivers do not attempt to drive around the humps. By establishing and following guidelines in the application of the speed humps the City is lessening the potential for liability. The cost to the City is $2,000 per hump which they pay out of road monies.

Tony Adams of the Michigan Concrete Institute was our first speaker after lunch. Tony spoke about “New Developments in White-Topping of Blacktop Roads.” Ultra-thin white topping (UTW) is a way to extend asphalt pavement life. UTW is durable, has fast application and turn around, resistance to rutting and wash boarding. It involves placing 3/4 to 4 inches of synthetic fiber reinforced concrete on the existing road surface. The existing surface is prepared by milling and cleaning. The material bonds to the asphalt surface allowing the use of the existing asphalt as a substructure. Under most conditions the road may be used to operate within eight to 24 hours after application. Minimal finishing is required as curing begins immediately.

Michigan Section ITE Treasurer's Report

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<th>DATE</th>
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<td>Lansing</td>
<td>Lugnuts Family Night</td>
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<td>(517) 483-4243</td>
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<td>July 10</td>
<td>East Lansing</td>
<td>Tech Session</td>
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<td>(517) 353-6448</td>
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<td>August 3-6</td>
<td>Boston, MA</td>
<td>International ITE Mtg.</td>
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<td>(616) 249-3470</td>
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<td>Sept. 25-26</td>
<td>East Lansing</td>
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<td>(616) 333-3330</td>
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<td>Nov. 13</td>
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<td>Dec. 11</td>
<td>Farmington Hills</td>
<td>Annual Meeting</td>
<td>Kevin McCarthy</td>
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The 1997 Technical Project

At the February 13, 1997 Michigan Section meeting held in Flint, the Executive Board appointed Lori Swanson from Hubbard, Rob & Clark, Inc., as the Technical Project Chairperson. The board also chose a topic for this year's technical project. It was decided that the topic of the 1997 technical project would be updating the Speed Control in Residential Areas booklet. If anyone is interested in volunteering to work on the project, please contact Lori Swanson at 830-328-9241 (or Email: lowanson@hrc-engr.com).

CALL FOR ABSTRACTS

The Institute of Transportation Engineers invites you to submit an abstract of a paper that you would like to have considered for presentation at the 68th Annual Meeting. It will be held in Toronto, Ontario, Canada, Aug. 9-12. Abstracts should be up to 300 words and fill no more than one typewritten page. Abstracts must be received at the ITE Headquarters no later than Sept. 15, 1997.
INTRODUCING CANDIDATES FOR ITEE INTERNATIONAL VICE PRESIDENT

John M. Mason, Jr., Ph.D., P.E. (F)

I feel very fortunate to be nominated as a candidate for the International Vice President of ITEE. My association with ITEE over the years has provided both professional and personal growth. This new opportunity allows me to share my views on sustaining and enhancing ITEE's role as the principal association for transportation professionals. Although the Institute will continually modify itself to meet ever changing demands, I believe there are several items that justify particular attention to maintain the collective strength and influence that ITEE currently enjoys:

- Membership Services
- Professional Development Activities
- Certification Programs
- External Constituency Interactions

Membership Services — Why join ITEE? A test-of-success for ITEE is a scenario of: When an individual member has a question, needs information, or requests guidance, the member's first thought is to call upon all of ITEE's resources for help. The assistance may come from ITEE staff, ITEE Internet connection, or another ITEE member. Maintaining ITEE efforts of satisfying the information needs of its diverse, international members is key to preserving a vibrant and effective professional organization.

The continued development of timely and informative high quality products is a requisite service. Products must be accurate, easy to obtain, and reasonably priced. Ongoing assessments of the membership needs and desires will keep the pipeline full of ideas. ITEE's councils, board of directors, and staff can assist in prioritizing the activities that will serve the maximum number of members.

Professional Development Activities — Professional development programs must remain a core function of ITEE. Both technical and non-technical activities are essential to meet the needs of the broad based constituency of ITEE. In-depth, comprehensive programs are necessary for entry level personnel; continuing education efforts are likewise beneficial for the career professional.

I fully support ITEE's recommendations for federal support of ongoing transportation education and training efforts, planning and research investments, focus of strengthening highway safety initiatives, and enhancing domestic and international efforts encouraging international/multi-modal integration. Hopefully these critical issues will receive the necessary appropriations and ITEE can focus its program activities to assist in successful implementation.

Nazir Lalani, P.E. (F)

Nazir Lalani, P.E. (F) is currently the City Transportation Engineer for the City of San Buenaventura, California. Nazir received strong encouragement to become an ITE International Vice Presidential candidate from ITEE members, who felt that his proven track record of serving ITEE for more than 15 years, would benefit the ITEE organization. Nazir feels honored to be selected as a candidate and would consider it a privilege to continue serving the ITEE membership. Born in Tanzania, Nazir has a truly international background. Upon receiving his Bachelors Degree from Exeter University in England, Nazir started his career in London in 1974. In 1978, Nazir moved to the United States and joined the consulting firm of Centennial Engineering in Colorado. Nazir has also held positions with public agencies and is an instructor for UC Berkeley. This broad background has given him an excellent understanding of the challenges facing both the public and private sector. His leadership positions at different levels within ITE, and involvement with various committees, has provided Nazir with the unique qualities needed to lead ITE towards the next century.


Leadership Priorities: Serving as a District officer and International Director for seven years has provided Nazir an excellent insight into what members want from ITE. If elected, these are some goals that Nazir would like to pursue:

- Focus on the resources on hot topics such as Traffic Calming and ISTEA re-authorization.
- Support International members activities in Canada, Australia and New Zealand as well as newly formed groups in Africa, S. America, Europe and the Persian Gulf Region.
- Encourage idea sharing through the publication of columns such as Transportation Tips.
- Expand use of the Internet and CD-ROMs to publish information more efficiently.
March Technical Meeting Notes
by Shirley Woliner

Ken Johnson hosted the March meeting of the Michigan Section at the Midway Hotel in Lansing. At the meeting the pending retirement of three long-time MDOT employees was announced. Mike Schaefer, Bill Schaefer with 31 years of service, and Mert Fener 37 years of service. At the meeting Tim Haagama also presented John Robbins with the ITE Life Membership. Bob Larson is also a recipiant of the Life Membership.

Our first speaker was John Striefer of Striefer-Lite Corporata. Jon’s presentation was titled “Deer Reflectors Save Deer and People Too!” More than 500,000 deer are killed on our roadways each year. The actual number of deer killed is estimated to be as much as double the recorded figure since many deer die away from the collision point. In 1995, 8 fatalities, 2,193 injuries, and 62,000 property damage accidents occurred in Michigan because of car-deer collisions. Michigan is 3rd in deer crashes recorded by states. The Striefer-Lite Wild Animal Highway Warning Reflector System creates an unnatural light pattern, forming an optical warning fence. Swarens manufactures the Striefer-Lite in Austria. The Striefer Corporation is the exclusive distributor of the system in the United States and Canada. The reflectors originated in Austria in 1971 and have been used in Europe for several years. Calhoun County has installed the reflectors at two half mile sites. These were two of the highest crash sites in the county. For a six-month period after the installation (September to March) no crashes were recorded. Livingston County is also using the reflectors.

The reflectors need to be cleaned approximately twice a year, on a need dependent basis. The reflectors can be set up to 40 feet from the pavement edge, with the distance between reflectors not to exceed 125 feet. They have been used in Allegator Alley in Florida to protect the panther, in the Badlands for elk, and on the Canadian Northern Railway to protect against moose collisions. Interested individuals can contact John at 309-794-9600.

Dr. Shahnahm Khanabhis from Wayne State University was the second presenter of the meeting. Dr. Khanabhis was selected on the “Engineering and Legal Aspects of Automated Highways.” Automated Highway Systems (AHS) are a major component of Intelligent Highway Systems and provide automated control of high speed corridors by a complex combination of roadways communications. The goal is to efficiently manage existing transportation resources, increase capacity, and safety. AHS is attractive because no major construction is needed to increase safety and capacity. AHS works similarly to the idea of a train hauling multiple cars except that not all the cars have the same origin and destination, and more stops are involved. Space is needed between platoons to prevent platoon decouplings and gaps. Multiple gates are needed at the same exit or entrance to ensure flow is maintained at a consistent speed.

The disadvantage of AHS is that no precedence exists for the technology. It is a defense technology being applied to a civil situation. It forces decision making from a traffic control to auto control. Elderly drivers may not be suited to the technology and there may be an issue with ADA restrictions. If an automated highway system were to fail, there is uncertainty as to who would be liable. Since no standards exist, courts will have difficulty deciding litigation issues. The key issue in litigation decisions will be on whether it is a product or service that will be provided. This is an unclear issue with AHS as the difference between products and services is not clear.

What is needed in the realm of AHS is a process to assess responsibilities in the case of negligence. In addition, procedures to exempt from liability needs to be in place. The goal is to balance the interests of citizens at large versus agencies, employers, and contractors.

The last presenter for the morning was Ken McCarthy of the City of Farmington Hills. Ken presented the procedure that Farmington Hills has set up for “Traffic Calming on City Streets.”

The way the City used to handle citizen complaints was to require the citizen to isolate the problem to a 2 hour block of time at a specific location. That time period at that location would then be studied and selective enforcement applied. This was occurring at the rate of 200 locations a year.

To develop a more efficient and effective means of handling citizen complaints the City developed the Traffic Safe T#2 Program. This is a safety awareness program that stresses Education, Enforcement, and Engineering. The program provides a systematic approach to identifying traffic problems and the phasing of different alternatives for their solution. The phasing is graduated from the simplest solution to the most restrictive, with the understanding that if a particular method does not resolve a situation, then a more restrictive approach may be necessary. Throughout this process the homeowner’s association or resident group is directly involved. In this way the reason for the problem, why the problem is occurring, what measures can be anticipated to resolve the situation, and when to expect some relief.

Cont. on P. 10

ITE Michigan Section Technical Session Notes - Feb. 13
by Shirley Woliner

Our Feb. Technical Meeting was hosted by Dennis Grylloki of the Genesee County Road Commission. The meeting was well attended and a wide variety of topics were covered. The program offered something for everybody from safe transportation of non-drivers, to signage, community enhancements, bridge construction and legislative issues.

AAA Pedestrian Programs by Dave Feber, Auto Club of Michigan

Dave made sure everyone in the audience was awake by showing us his talents as a magician. He used an unconventional approach to start his talk to highlight some unconventional approaches to convey the impact of pedestrian crashes. Dave started off by discussing the Pedestrian Safety Action Team. This team was mandated by the 1991 ISTEA legislation. The goals of the team are: to gain an understanding of pedestrians crashes, increase public awareness, promote pedestrian safety advocacy groups, and provide a model for community programs.

There is an increasing trend when looking at pedestrian fatalities in Michigan during the years 1992 to 1995. Pedestrian crashes at intersections have actually decreased - only 1/8 of the pedestrian accidents are occurring at intersections.

Pedestrians have a number of risks. The first is turning vehicles at intersections. The pedestrian is at risk stepping off the curb, dealing with turning vehicles and vehicles leaving the intersection after they turn. Another risk is the "visual screen" formed by other vehicles or objects in the roadway. Pedestrians create a risk for themselves by only relying on the pedestrian signal as an indicator of when it is safe to cross. This "signal faith" issue is a key problem with the elderly. Pedestrians are also at risk in non-intersection situations. Non-intersection accidents include backing vehicles, sidewalk accidents and parking lots.

Dave also talked about the importance of including pedestrian considerations in design of school sites. Design concepts such as the separation of pedestrians and vehicles, curbside access, and elimination of the need for backing maneuvers should all be incorporated as part of school site safety. We have been seeing situations where No Parking signs are placed on the school side of street to improve traffic flow. However, this promotes students crossing mid-block for parent pick-up. OSHP has a new release of Traffic Safety Planning on School Sites that can be used to promote pedestrian safety at schools.

The FHWA has a pilot program to promote pedestrian safety awareness. The Walk Alert Program provides safety guidelines for communities. Five pilot communities have been selected for federal road shows to show off the program. Highland Park was one of the five communities selected and has been very successful in incorporating it. Eight to ten more communities in Michigan will have an opportunity to participate in the program this year through the OSHP. These communities will be chosen on the basis of the number of pedestrian crashes and crash rates, as well as on their level of interest.

Dave concluded his presentation with a video that highlighted some of the situations that are hazardous for pedestrians.

School Buses Present and Future: Is the Safest Travel Mode to School in Danger?, by Sergeant Sharron VanKampen, Michigan State Police Motor Carrier Division

Sharron is in charge of the Bus Inspection Program. Changes are underway in the way pupil transportation is handled and Sharron’s talk focused on the implications of those changes.

Children get to school in a number of ways, only one of which is in the familiar yellow bus. Dial-a-Ride, transit, and parents all provide student transportation. School receives transportation funding as a block amount per student. In tight budget situations these dollars are often shifted into educational funds. The school bus is the safest form of transportation for our school kids but that form of transport is in trouble and in need of revision. The reason is not one of idenity of this school. Schools have moved out of the center of the community too far for students to walk to school. In addition, we no longer feel it is safe for children to walk to school. This makes the issue of student transportation an important one.

The School Bus Inspection Program has been changed this year. Formerly, every bus in the fleet was inspected once a year. Now 50 percent of the vehicles are selected for inspection due to monetary constraints. There seems to be some mistrust with voluntary compliance under this new system.

Many schools are now outsourcing transportation. Schools are not required by law to provide transportation. The outsourcing doesn’t save a district any money but it provides fewer worries for the school district. This type of environment doesn’t provide the safe environment of the yellow bus. No records are kept of fights that occur on the bus or at bus stops. The drivers are not obligated to do anything other than drive the vehicle.

Sharron thinks that one solution to these types of issues may be the Cooperative Transportation. This system refers to adjacent districts in a county or other region pooling their buses, mechanics, and other transportation resources. This will save money and alleviate part of the burden. The school buses could be used in off peak hours to provide other services such as transportation for the elderly.
February Notes, Cont.

Traffic Signing Ideas to Save Lives and Enery
by Laurel Painter, MDOT Saginaw District

Laurel gave a slide presentation that showed a number of examples of traffic signing innovations in the field. These designs provided an interesting insight into meeting the needs of a particular situation.

Laurel feels that advance road name signs are a good idea. Proper use of graphics is important to reflect the situation that drivers will encounter. He also discussed placing route markers above directional signs to help drivers select their desired route. Some nonstandard signage was presented including signs which are used at street end stops, especially where traffic control has changed. One situation used a "Cross Street Does Not Stop" plaque to reinforce the need for drivers to check approaching traffic before entering the intersection. Another sign used to reinforce this idea was one which read "Make Sure Cross Street Traffic Stops." Sign maintenance was another element that Laurel stressed. Detour signing, on-signal signage, and fire station signage were also highlighted in Laurel’s presentation.

The Livingston County Greenway Initiative
by William Wagoner, Planning Department of Livingston County

Bill is the Director of Planning and Emergency Management for Livingston County. He has written a book on Greenway Planning that took place today, and how Livingston County is developing its Greenway vision.

Greenways provide an open space character that attracts people. They can benefit communities by providing recreational and social opportunities. They assist in the local economy by providing value to retail and recreational areas. They help the ecology of an area and promote a community’s image by reinforcing a community focus - not just a housing location.

But greenways need planning and effort for success. Greenway planning must take place at the local level. It cannot be forced but it can be encouraged. Livingston County takes this role by acting as an educator and facilitator. The County provides guidebooks and technical experts to local communities to assist them in their efforts. In this way the County helps maintain some consistency in the Greenway initiatives that the Greenway Vision for SE Michigan.

There are currently 435 greenways in 42 states for a system of almost 5000 miles. There are plans to link the greenways in southeast Michigan to other greenways in the state, in the United States, and even into other countries.

Many opportunities exist for the establishment of greenways. Abandoned railroad corridors, river, utility and road corridors all provide opportunities. Wetlands are often connected to greenways. Considerations must be given to the type of use planned for the greenway, whether pedestrian, non-motorized, water recreation, or motorized vehicles. Consistency in the use of the greenway between neighboring communities is also important.

Many resources are available for development and design guidelines. Funding can be provided through state and federal grants, bond sales and donations. Livingston County also has books that provide information on greenway issues.

February Notes

Today’s Hot Transportation Legislative Items
by Matt Delong, Assistant to the Director, MDOT

Our final presenter gave us a review of the transportation related legislative items in 1996 and a look ahead into 1997. The current stalemate of the state/local funding split is expected to be even more pronounced. The state government feels that the state should have the greater share of funding allocation due to the importance of the state routes to the local economy and that the current method of allocation is not equitable. The local communities feel that the state isn’t an independent entity and that there is no need to change the current formula. Some understandings may occur such as the locals agreeing to extra funding for bridge work. There has been a great interest from the gas tax at all levels of the state government.

Michigan didn’t act as fast as some states did to the federal speed limit repeal due to stronger safety concerns. The governor and the legislature came together to establish test zones which Michigan State University monitored to determine the impact of raising speed limits. The basic speed data showed that speeds remained fairly constant with the test speeds being raised to 70 mph in most of the non-urban areas. The intent was to have this completed by March 1 however this is somewhat behind schedule.

The safety community used the speed issue to bring up other traffic safety related issues, such as the use of seatbelts, speed in construction zones, special zones, and photo cops. Fines have been doubled in construction zones and the state police have reminded their officers to enforce this. Our legislators are not quite ready to accept the use of photo cops although other states have given their approval. Highway Tort Reform passed the Senate but not the House. Changes to the Uniform Condemnation Act passed which allows for fewer challenges to the necessity of condemnations. Diesel fuel tax has increased to 21 cents a gallon but the 6 cent diesel discount still exists. The fuel tax can be paid quarterly but users can also apply for a refund of state sales tax.

Matt doesn’t expect any new issues in 1997. Concern will still exist over accountability. Phil Hoffman has proposed and revised some bills that address this issue. Any type of gas tax increase looks unlikely to occur as well as any shifts in revenue sources. The Governor has proposed an additional 43 million dollars from the state economic development fund to be used for special projects. His newsletter, and address to the legislature called for efforts to curtail aggressive drivers although nothing has shown up on the legislative agenda yet.

At the federal level, the reauthorization of ISTEA is due in 1997. ISTEA sunsets on September 30 and the reauthorization is not expected to be resolved at that time. If this occurs, there will be no funding and that will put the squeeze on the government to reach a solution quickly. This issue is unforgiving to Michigan transportation interests. The goal is to get more money back that we send to the feds. For every dollar sent, the State gets 78 cents back. There is also a desire to reduce the number of strings attached to federal aid - hopefully allowing more flexibility. A reduction in federal red tape by promoting a more uniform system would help deal with all issues related to a project at once.

How Engineering Specifications Live Forever

The U.S. Standard railroad gauge (distance between the rails) is 4 feet, 8.5 inches. That’s an exceedingly odd number.

Why was that gauge used? Because that’s the way the built them in England, and the US railroads were built by English expatriates.

Why did the English people build them like that? Because the first rail lines were built by the same people who built the pre-railroad tramways and that’s the gauge they used.

Why did “they” use that gauge then? Because the people who built the railways used the same jigs and tools that they used for building wagons, which used that wheel spacing.

Okay! Why did the wagons use that odd wheel spacing? Well, if they tried to use any other spacing the wagons would break on some of the old, long distance roads, because that’s the spacing of the old wheel rails.

So who built those old nutted roads? The first long distance roads in Europe were built by Imperial Rome for the benefit of their legions. The roads have been used ever since. Over and over. And over! The initial rails, which everyone else had to match for fear of destroying their wagons, were first made by Roman war chariots. Since the chariots were made for or by Imperial Rome they were all alike in the matter of wheel spacing.

This, we have the answer to the original question. The U.S. standard railroad gauge of 4 feet, 8.5 inches derives from the original specification for an Imperial Roman army war chariot.

Specs and Bureaucracies live forever.

So the next time you are handed a specification and wonder where this old app came up with it, you may be exactly right. Because the Imperial Roman chariot were made to be just wide enough to accommodate the back-ends of war horses.

REMEMBER
Third International Symposium on Intersections without Traffic Signals
July 21-23
Portland Oregon